

ABSTRACTELECTROLYTIC POT COOLING METHOD AND SYSTEM FOR
ALUMINIUM PRODUCTION

The invention relates to a cooling method of a igneous electrolytic cell (1) for aluminium production wherein heat transfer fluid droplets (or "divided heat transfer fluid") are produced, preferentially in a confined volume in contact with a specified surface of at least one wall of the shell (2) of the pot of the electrolytic cell (1), so as to induce the evaporation of all or part of said droplets by contact with said surface and remove the heat from said surface. The invention also relates to a cooling system (100) capable of implementing the cooling method. The invention makes it possible to obtain a high cooling efficiency due to the latent heat of vaporisation of the heat transfer fluid.

10 Figure 2